

AMENDMENTS IN THE CLAIMS

1. (Currently Amended) A method of transmitting a physical layer information stream having a plurality of sub-blocks, each sub-block having an error correction code, $[[,]]$ and a priority if the sub-blocks have a different QoS(Quality of Service), comprising the steps of:

dividing the encoded physical layer information stream having different sub-blocks into each of a plurality of slots;

initially sequentially transmitting the divided slot data to a receiver in predetermined time intervals one of the plurality of slots;

receiving indication information that at least one of the sub-blocks in the initially transmitted slot from a receiver indicates an error and the other sub-blocks are good in reception;

repeating the at least one of the sub-blocks indicating the error within a length of a slot permitted in retransmission; and

re-transmitting slot data with a sub-block having an error repeated within the number of the sub-blocks after transmission of initial slot data, upon receipt of an HARQ (Hybrid Automatic Repeat Request) message for the initial slot data from a receiver, indicating that at least one of the sub-blocks in the initial slot data has a reception error indicating failure and the other sub-blocks are good in reception the repeated at least one of the sub-blocks.

2. (Currently Amended) The method of claim 1, wherein if the at least one of the sub-blocks failed sub-block having the an error is transmitted at least twice, the slot data repeats only the failed sub-block at least one of the sub-blocks and includes the number of the sub-blocks.

3. (Original) The method of claim 1, wherein the sub-blocks are encoded using quasi-complementary turbo codes (QCTCs).

4. (Original) The method of claim 3, wherein a code set is generated prior to initial transmission and the initial transmission is performed using a predetermined code in the code set.

5. (Original) The method of claim 1, wherein if at least one sub-block is retransmitted after the sub-blocks are transmitted a predetermined number of times, the code of the retransmission-requested sub-block is changed.

6. (Original) The method of claim 5, wherein the code is changed to an unused code in the code set in a predetermined order.

7. (Original) The method of claim 6, wherein upon receipt of a retransmission request after retransmission-requested sub-blocks are transmitted using all the codes of the code set, the retransmission-requested sub-block is transmitted using a code selected in the predetermined order starting from the code for initial transmission.

8. (Currently Amended) The method of claim 2, wherein repetition times of the at least one of the failed sub-blocks are determined according to the priorities of the sub-blocks have a different QoS.

9. (Currently Amended) The method of claim 8, wherein if the number of the transmitted sub-blocks is an integer-multiple of the number of the ~~failed~~ at least one of the sub-blocks, the at least one of the failed sub-blocks are repeated ~~the~~ a same number of times if the ~~failed~~ at least one of the sub-blocks have ~~the~~ a same priority.

10. (Original) The method of claim 9, wherein if the sub-blocks are transmitted at least twice and a signal is received before the sub-blocks are transmitted at least twice, indicating that the transmitted sub-blocks have been successfully received in the receiver, the transmission of rest of the sub-blocks to be transmitted is discontinued and transmitting a next physical layer information stream having a plurality of sub-blocks.